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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,248	09/16/1999	SHMUEL PELEG	YIS-002	7168

7590 02/26/2002

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EXAMINER

SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/396,248

Applicant(s)

PELEG ET AL

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1 – 8 are rejected under 35 U.S.C. 102 (e) as being anticipated by Kumar et al. (US 5,963,664).

Regarding claim 1, Kumar '664 discloses system for generating a panoramic mosaic image pair for use in facilitating panoramic stereoscopic viewing of a scene from a series of images corresponding to respective position (i.e. fig. 1, cameras 104, col. 3, lines 61+).

Regarding claim 2, figure 2 of Kumar '664 shows representation of individual images and change of the respective position, which inherently includes change in angular orientation to generate an image mosaic (i.e. col. 7, lines 38+).

Regarding claims 3 – 6, Kumar '664 discloses translation vector for aligning the images (i.e. abstract), also image generator for generating series of images (i.e. fig. 8, unit 804, and fig. 11, unit 1124, + abstract), and image generator generates series of images using a predetermined computer graphic technique (i.e. fig. 11, col. 1, lines 29+ and col. 2, lines 39+), and image generator comprises a camera rig configured to record images of a scene (i.e. fig. 11, unit 1104, col. 16, lines 21+).

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Regarding claims 7 and 8, Kumar '664 discloses camera rig records series of images, and left and right panoramic image generates utilize portion of the image generating the left and right panoramic images (i.e. col. 8, lines 2+), and separately recording images (i.e. fig. 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 5,963,664) in view of Ritchey (US 5,130,794).

Regarding claims 9 and 10, Kumar '664 discloses a system generating panoramic three-dimensional mosaic from plurality of images of a scene.

Kumar '664 fails to teach multiple displays for displaying a panoramic image to a viewer, and also a display device configured to be placed in front of a viewer's eyes.

However, such limitations are well - known in the art as evidenced by Ritchey '794. in particular, Ritchey '794 clearly teaches multiple displays of a head mounted (i.e. figs. 24 – 26, abstract, col. 4, lines 26+).

In view of this, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kumar '664 as taught by Ritchey '794, since Ritchey '794 states at col. 4, lines 52+ that such a modification would provide an improved image display system.

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As for claim 11, Ritchey '794 teaches display control (i.e. col. 9, lines 58+)

As for claim 12, Ritchey '794 teaches plurality of projectors (i.e. col. 32, lines 56+).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure;

Hekstra et al. (US 5,596,321) system comprising a first encoder for coding a first digital signal.

Crinon et al. (US 6,249,613) mosaic generation and sprite-based coding with automatic foreground and background separation.

Melen (US 6,205,241) compression of stereoscopic images.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314


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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B.S. B.S.

02/21/02


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600